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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/801,993      | 03/08/2001  | Jeffrey P. Kubala    | POU920000201US1     | 5841             |

7590 01/24/2005  
Floyd A. Gonzalez  
IBM Corporation - MS P386  
2455 South Road  
Poughkeepsie, NY 12601

EXAMINER

SIDDIQI, MOHAMMAD A

ART UNIT PAPER NUMBER

2154

DATE MAILED: 01/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|  |                                       |                                      |  |
|--|---------------------------------------|--------------------------------------|--|
| <p align="center"><b>Office Action Summary</b></p> | <b>Application No.</b><br>09/801,993  | <b>Applicant(s)</b><br>KUBALA ET AL. |  |
|  | <b>Examiner</b><br>Mohammad A Siddiqi | <b>Art Unit</b><br>2154              |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10/05/2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-43 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

1. Claims 1- 43 are presented for examination.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

3. Claims 1-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gulick et al. (6,314,501) (herein after Gulick) in view of Kutcher et al. (6,301,615) (hereinafter Kutcher).

4. As per claims 1, 15,29, and 43, Gulick discloses a method in a computing system having a first partition including a first operating system and a second partition including a second operating system (Fig 1, col 3, lines 3-5), the method comprising the steps of:

- a) conveying first partition information from said first partition to a partition manager (shared window, col 2, lines 62-64,col 3, lines 6-35, col 4, lines 40-42);

b) creating in said partition manager (program code, col 3, lines 17-20), resource balancing directives from said resource balancing directives based on said first partition information (col 3, lines 25-35, col 52, lines 3-45); and

c) allocating resources to said first partition by the partition manager according to the resource balancing directives (col 52, lines 3-45).

Gulick, is silent about the conveying throughput information.

However, Kutcher discloses throughput information (throughput is amount of work that can be performed by a computer system or component in a given period of time can be monitored by the NETSTAT and VMSTAT, col 5-6, col 2, lines 29-55).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use performance-monitoring utilities and directs data to the server system to examine the performance of the system throughput.

5. As per claims 2,16, and 30, Gulick discloses the partition manager comprises a workload manager running in said second partition and a hypervisor (Unisys MCP, col 12, lines 30-54, col 33, lines 7-29).

6. As per claims 3,17, and 31, Gulick discloses the conveying information between partitions includes inter-partition memory sharing (shared window, col 2, lines 62-64,col 3, lines 6-35, col 4, lines 40-42).

Gulick, is silent about the conveying throughput information.

However, Kutcher discloses throughput information (throughput is amount of work that can be performed by a computer system or component in a given period of time can be monitored by the NETSTAT and VMSTAT, col 5-6, col 2, lines 29-55).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use performance-monitoring utilities and directs data to the server system to examine the performance of the system throughput.

7. As per claims 4, 18, and 32, Gulick discloses the conveying information between partitions includes single operation message passing (col 5, lines 1-8, col 11, lines 15-16).

Gulick, is silent about the conveying throughput information.

However, Kutcher discloses throughput information (throughput is amount of work that can be performed by a computer system or component in a given period of time can be monitored by the NETSTAT and VMSTAT, col 5-6, col 2, lines 29-55).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use performance-monitoring utilities and directs data to the server system to examine the performance of the system throughput.

8. As per claims 5, 19, and 33, Gulick teaches the information is obtained by a packet activity counter (col 44, lines 28-39, col 53, lines 30-50).

Gulick, is silent about the conveying throughput information.

However, Kutcher discloses throughput information (throughput is amount of work that can be performed by a computer system or component in a given period of time can be monitored by the NETSTAT and VMSTAT, col 5-6, col 2, lines 29-55).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use performance-monitoring utilities and directs data to the server system to examine the performance of the system throughput.

9. As per claims 6, 20, and 34, Gulick teaches the information is obtained by counting network packets related to a partition (col 44, lines 28-39, col 53, lines 30-50, col 3, lines 33-35).

Gulick, is silent about the conveying throughput information.

However, Kutcher discloses throughput information (throughput is amount of work that can be performed by a computer system or component in a given period of time can be monitored by the NETSTAT and VMSTAT, col 5-6, col 2, lines 29-55).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use performance-monitoring utilities and directs data to the server system to examine the performance of the system throughput.

10. As per claims 7, 21, 35, Gulick teaches the said network packets comprise packet received by a partition (col 53, lines 31-50)

11. As per claims 8, 22, and 36, Gulick teaches the network packets comprise packets sent by a partition (col 53, lines 31-50).

12. As per claims 9, 23, and 37, Gulick discloses the network packets are related to first partition (col 53, lines 31-50).

13. As per claims 10, 24, and 38, Gulick is silent about the throughput information is obtained by relating network traffic to a processor utilization over a period of time.

However, Kutcher discloses the throughput information is obtained by relating network traffic to a processor utilization over a period of time (NETSTAT and VMSTAT, col 5-6).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use performance-monitoring utilities and directs data to the server system to examine the performance of the system throughput.

14. As per claims 11, 25, and 39, Gulick is silent about the network traffic is obtained by counting network packets related to a partition. However, Kutcher discloses the network traffic is obtained by counting network packets related to a partition (NETSTAT and VMSTAT, col 5-6).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use performance-monitoring utilities and directs data to the server system to examine the performance of the system throughput.

15. As per claims 12, 26, and 40, Gulick is silent about the processor utilization is obtained from a system activity counter. However, Kutcher discloses the processor utilization is obtained from a system activity counter (NETSTAT and VMSTAT, col 5-6).



Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use performance-monitoring utilities and directs data to the server system to examine the performance of the system throughput.

16. As per claims 13, 27, and 41, Gulick is silent about the processor utilization is a system activity counter. However, Kutcher discloses the processor utilization is a system activity counter (NETSTAT and VMSTAT, col 5-6).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use performance-monitoring utilities and directs data to the server system to examine the performance of the system throughput.

17. As per claims 14, 28, and 42, Gulick is silent about a network traffic to a processor utilization is a ratio of number of packets over time. However, Kutcher discloses disclose a network traffic to a processor utilization is a ratio of number of packets over time (NETSTAT and VMSTAT, col 5-6).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use performance-monitoring utilities and

directs data to the server system to examine the performance of the system throughput.

### ***Response to Arguments***

18. Applicant's arguments filed 10/12/2004 have been fully considered but they are not persuasive, therefor rejections to claims 1-43 is maintained.

19. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Gulick and Kutcher both are analogous art. Gulick teaches inter-partition communication by using shared window and load balancing by program code. Kutcher teaches cluster performance monitoring using Unix standard utilities. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of Gulick and

Kutcher. The motivation would have been to use performance-monitoring utilities and directs data to the server or partition manger or application (load balancer process) to examine the performance of the system and manage the resources based on throughput information.

20. In the remarks applicants argued, the following limitations is not taught by the combination of Gulick and Kutcher:

- a. conveying first partition throughput information from said first partition to a partition manager;
- b. creating in said partition manager, resource balancing directives from said resource balancing directives based on said first partition throughput information; and
- c. allocating resources to said first partition by the partition manager according to the resource balancing directives.

21. In response to applicants arguments a-c, examiner respectfully disagrees. Gulick teaches conveying first partition information from said first partition to a partition manager (partition manager is a program code that manages inter-partition communication, col 2, lines 62-64, col 3, lines 6-35, col 4, lines 40-42); creating in said partition manager (program code, col 3, lines 17-20), resource balancing directives from said resource balancing

directives based on said first partition information (col 3, lines 25-35, col 52, lines 3-45); and allocating resources to said first partition by the partition (col 4, lines 40-43) manager according to the resource balancing directives (duties of master partition, col 52, lines 3-45). Gulick, is silent about the conveying throughput information. However, monitoring throughput information using Unix utilities NETSTAT and VMSTAT is well known in the art. Kutcher, for example, teaches throughput information (throughput is amount of work that can be performed by a computer system or component in a given period of time can be monitored by the NETSTAT and VMSTAT, col 5-6, col 2, lines 29-55). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of Gulick and Kutcher. The motivation would have been to use performance-monitoring utilities and directs data to the server or partition manger or application (load balancer process) to examine the performance of the system based on the throughput information.

### ***Conclusion***

22. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohammad A Siddiqi whose telephone number is (571) 272-3976. The examiner can normally be reached on Monday -Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MAS



JOHN FOLLANSBEE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100